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## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application:

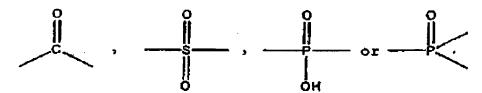
## **Listing of claims:**

- 1. (Currently Amended) A binder system for a paint formulation comprising an organos dyl ester of a carboxylic, sulphonic or phosphoric acid as an alkaline hydrolysis or erodal ility booster, wherein the carboxylic, sulphonic or phosphoric acid part of the organosilyl ester is saturated at the alpha carbon.
- 2. (Previously Presented) The binder system according to claim 1, comprising more than one organosilyl ester of a carboxylic, sulphonic or phosphoric acid.
- 3. (Deleted)
- 4. (Previously Presented) The binder system according to claim 1, which comprises a fi m forming binder.
- 5. (Previously Presented) The binder system according to claim 1, wherein the organosi ylester is film forming.
- 6. (Currently Amended) A film forming or resinous binder for a paint composition com rising organosilylesters of carboxylic, sulphonic or phosphoric acid, wherein the carboxylic sulphonic or phosphoric acid part of the organosilyl ester is saturated at the alpha car on and is said acid having a non vinylic alpha carbon and being other than rosin.
- (Currently Amended) The binder system of claim 1 2, wherein said carboxylic acid is a
  monocarboxylic acid and is a binder component of the binder system.
- 8. (Currently Amended) A paint composition comprising organositylesters of monocart oxylic, sulphonic or phosphoric acids, wherein the acid is saturated at the alpha carbon and is said acids having a non-vinylic alpha carbon and being other than rosin.

- (Currently Amended) A paint composition according to claim 8, wherein the paint
  composition comprises a binder system, said binder system comprising said organosi ylesters
  of monocarboxylic, sulphonic or phosphoric acid as a binder component.
- 10. (Currently Amended) A paint composition comprising silvlesters of monocarboxylic, sulphonic or phosphoric acid, wherein the acid is saturated at the alpha carbon and is other than rosin as a binder component of a binder system.
- 11. (Previously Presented) A paint composition according to claim 8, which comprises a mixture of organosityl esters of monocarboxylic, sulphonic or phosphoric acids.
- 12. (Currently Amended) A process for preparing a paint composition characterised in that one step of the process is the addition of organosilylesters of acids <u>saturated</u> at the alpha arbon and other than rosin as a binder component of a binder system.
- 13. (Previously Presented) A process for preparing a paint composition according to clair 1 12, wherein the paint composition is an antifouling paint.
- 14. (Currently Amended) A binder composition according to claim 1, wherein the organc silyl ester of the carboxylic, sulphonic or phosphoric acid is based on a hydrocarbyl residu: of three or more carbons greater than or equal to C3.
- 15. (Previously Presented) A paint composition according to claim 8, wherein the organo silyl ester of the acid is represented by the general formula (I):

$$R^{7} - Z = \begin{pmatrix} R^{4} & R^{1} \\ \vdots & \vdots & R^{2} \\ R^{5} & R^{3} \end{pmatrix}$$
(1)

wherein Z represents:



wherein each R<sup>4</sup> and R<sup>5</sup> may be hydroxyl or may be independently selected from alkyl, aryl, alkoxyl, aryloxyl, -L'-SiR<sup>1</sup>R<sup>2</sup>R<sup>3</sup>, -L'-(SiR<sup>4</sup>R<sup>5</sup>L')<sub>n</sub>-SiR<sup>1</sup>R<sup>2</sup>R<sup>3</sup>, -L'-SiR<sup>1</sup>R<sup>2</sup>-, -L'-(SiR<sup>4</sup>R<sup>5</sup>L')<sub>n</sub>-SiR<sup>1</sup>R<sup>2</sup>-, alkenyl, alkynyl, aralkyl or aralkyloxyl radicals optionally substituted by one or more substituents independently selected from the group comprising alkyl, alkoxyl, aralkyl, aralkyloxyl, hydroxyl, aryl, aryloxyl, halogen, amino or amino alkyl radicals, or R<sup>4</sup> or R<sup>5</sup> may independently be an -O-Z-R<sup>8</sup> group, wh rein R<sup>8</sup> is defined as R<sup>7</sup> below;

wherein each R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> may independently represent hydrogen, hydroxyl, alkyl, alkenyl, alkynyl, aryloxyl, aryloxyl, aralkyl or aralkyloxyl radical optionally substituted by one or more substituents independently selected from the group comprising alkyl, alkoxyl, aralkyl, aralkyloxyl, aryl, aryloxyl, halogen, hydroxyl, amino or amino alkyl radicals, or R<sup>1</sup>, R<sup>2</sup> or R<sup>3</sup> may independently be an O-Z-R<sup>8</sup> group, L' represents O, S, or NR<sup>6</sup>, where R<sup>6</sup> is defined as is R<sup>9</sup> below,

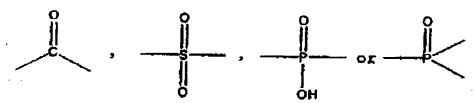
each n independently represents a number of  $-Si(R^4)(R^5)-L'$ - groups from 0 to 1000, wherein  $R^7$  is an aralkyl, aryl, alkenyl, alkynyl, or a  $C_2$  or higher alkyl group optic nally substituted, in the case of the hydrocarbyl radicals with one or more substituents  $\varepsilon$  elected from the equivalent substituents as defined for  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  above.

## 16. (Currently Amended) A process for producing a silyl ester of formula (I)

$$R^{7} - Z = \begin{pmatrix} R^{4} & R^{1} \\ S_{1} & R^{2} \\ R_{5} & R^{3} \end{pmatrix}$$

$$(I)$$

wherein Z represents:

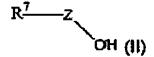


wherein each  $R^4$  and  $R^5$  may be hydroxyl or may be independently selected from alkyl, aryl, alkoxyl, aryloxyl, -L'-SiR<sup>1</sup>R<sup>2</sup>R<sup>3</sup>, -L'-(SiR<sup>4</sup>R<sup>5</sup>L')<sub>n</sub>-SiR<sup>1</sup>R<sup>2</sup>R<sup>3</sup>, -L'-SiR<sup>1</sup>R<sup>2</sup>-, -L-(SiR<sup>4</sup>R<sup>5</sup>L')<sub>n</sub>-SiR<sup>1</sup>R<sup>2</sup>-, alkenyl, alkynyl, aralkyl or aralkyloxyl radicals optionally substituted by one or more substituents independently selected from the group comprising alkyl, alkoxyl, aralkyl, aralkyloxyl, hydroxyl, aryl, aryloxyl, halogen, amino or amino alkyl radicals, or  $R^4$  or  $R^5$  may independently be an -O-Z- $R^8$  group, who rein  $R^8$  is defined as  $R^7$  below;

wherein each R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> may independently represent hydrogen, hydroxyl, alk /l, alkenyl, alkynyl, alkoxyl, aryl, aryloxyl, aralkyl or aralkyloxyl radical optionally substituted by one or more substituents independently selected from the group comprising alkyl, alkoxyl, aralkyl, aralkyloxyl, aryl, aryloxyl, halogen, hydroxyl, amino or amino alkyl radicals, or R1, R2 or R3 may independently be an -O-Z-R<sup>8</sup> group. L' represents O, S, or NR<sup>6</sup>, where R<sup>6</sup> is defined as is R<sup>9</sup> below, each n independently represents a number of -Si(R<sup>4</sup>)(R<sup>5</sup>)-L'- groups from 0 to 1000, wherein R<sup>7</sup> is an aralkyl, aryl, alkenyl, alkynyl, or a C<sub>2</sub> or higher alkyl group optic nally substituted, in the case of the hydrocarbyl radicals with one or more substituents selected from the equivalent substituents as defined for R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> above with the proviso that when R<sup>7</sup> is an alkenyl or alkynyl it does not include a vinylic is sature ted at

by reaction of a higher boiling acid of formula (II)

the alpha carbon;



wherein Z and R<sup>7</sup> are as described above; with a silyl ester of a lower boiling acid of formula (III)

$$\begin{array}{c|c}
O & \begin{pmatrix}
R^4 & & \\
Si & L'
\end{pmatrix} & \begin{pmatrix}
R^1 & \\
R^2 & \\
R^3 & \\
\end{array}$$
(III)

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, L' and n are defined above except where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>1</sup> or R<sup>5</sup> are an -O-Z-R<sup>8</sup> group in formula (I) they may be replaced by an -O-Z-R<sup>10</sup> group i i formula (III);

wherein  $R^9$  is defined as  $R^7$  above except  $R^9$  may also be hydrogen or  $C_1$  alkyl an I with the proviso that the acid of the ester formed by  $R^9$  ( $R^9$ ZOH) boils at a lower temp rature than the acid  $R^7$ ZOH of formula (II);

wherein  $R^{10}$  is defined as  $R^7$  above except  $R^{10}$  may also be hydrogen or  $C_1$  alkyl and with the proviso that the acid of the ester formed by  $R^{10}$  ( $R^{10}$ ZOH) boils at a lower temperature than the acid  $R^7$ ZOH of formula (II);

while removing the formed acid group of formula (IV) and/or (V)

R<sup>9</sup>ZOH (IV)

 $R^{10}ZOH(V)$ 

from the system to produce at least one protected acid group of said formula (I).

- 17. (Previously Presented) A paint composition according to claim 15, wherein when an a cytated silvl ester is represented by formula (I) it has more than one acyloxy group attached to one or several silicon atoms.
- 18. (Previously Presented) A process according to claim 16, wherein the carboxyl radical part of formula (IV) is selected from formyl, acetyl, propionyl and butyryl.
- 19. (Previously Presented) A process according to claim 16, wherein the carboxyl radical part of formula R<sup>7</sup>ZOH independently includes propionyl, butyryl, pivaloyl, oxaloyl, malony, succinyl, glutaryl, adipoyl, benzoyl, phthaloyl, isobutyroyl, sec-butyroyl, octanoyl, isooctanoyl, nonanoyl, isononanoyl, abietyl, dehydroabietyl, dihydroabietyl, naphtthe tyl.

anthracenyl, abietyl dimer (Dymerex®), fully hydrogenated dihydroabietyl (Foral®) and the like and polymers or copolymers thereof.

20. (Previously Presented) A process according to claim 16, wherein the organosilylated carboxylate compound of general formula (III) is trimethylsilylformiate, dimethylsilyldiformiate, methytsilyltriformiate, tri-n-butyl 1-acetoxy-silane, di-n-butyl 1,1diacetoxysilane, n-butyl 1,1,1-triacetoxy-silane, tri-n-propyl-1-acetoxy silane, di-n-propyl 1,1-diacetoxy-silane, n-propyl 1,1,1-triacetoxy-silane, tri-t-butyl-1-acetoxy-silane, tri isopropyl-1-acetoxy-silane, tri-isobutyl-1-acetoxy-silane, tri-methyl-1-acetoxy-silane dimethyl 1,1-diacetoxy-silane, methyl 1,1,1-triacetoxy-silane, triethyl-1-acetoxy-silane diethyl-1,1-diacetoxy-silane, ethyl 1,1,1-triacetoxy-silane, vinyl 1,1,1-triacetoxy-silane, tribenzyl-1-acetoxy-silane, triamyl-1-acetoxy-silane, triphenyl-1-acetoxy-silane, trimethylsilylpropionate, t-butyldimethylsilylacetate, pentamethyl-1-acetoxy-disiloxa ie, heptamethyl-1-acetoxy-trisiloxane, nonamethyl-1-butyldimethylsilylacetate, pentame hyl-1acetoxy-disiloxane, heptamethyl-1-acetoxy-trisiloxane, nonamethyl-1-acetoxy-tetrasi oxane, nonaethyl-1-acetoxy-tetrasiloxane, nona-t-butyl-1-acetoxy-tetrasiloxane, nonabenzyl-1acetoxy-tetrasiloxane, nona-isopropyl-1-acetoxy-tetrasiloxane, nona-n-propyl-1-aceto (ytetrasiloxane, nona-isobutyl-1-acetoxy-tetrasiloxane, nona-amyl-1-acetoxy-tetrasilox; ne, nona-n-butyl-1-acetoxy-tetrasiloxane, nona-dodecyl-1-acetoxy-tetrasiloxane, nona-hexyl-1acetoxy-tetrasiloxane, nona-phenyl-l-acetoxy-tetrasiloxane, nona-octyl-la-acetoxytetrasiloxane, undecamethyl-1-acetoxy-pentasiloxane, undecaethyl-1-acetoxy-pentasi oxane, undeca-t-butyl-1-acetoxy-pentasiloxane, undecabenzyl-l-acetoxy-pentasiloxane, undecaisopropyl-l-acetoxy-pentasiloxane, undeca-n-propyl-l-acetoxy-pentasiloxane, undecaisobutyl-1-acetoxy-pentasiloxane, undeca-amyl-1-acetoxy-pentasiloxane, undeca-nbutyl-l-acetoxy-pentasiloxane, undeca-dodecyl-1-acetoxy-pentasiloxane, undeca-hexyl-1acetoxy-pentasiloxane, undeca-phenyl-lacetoxy-pentasiloxane, undeca-octyl-l-aceto::ypentasiloxane, tridecamethyl-1-acetoxy-hexasiloxane, tridecaethyl-l-acetoxy-hexasilc rane, trideca-t-butyl-1-acetoxy-hexasiloxane, tridecabenzyl-1-acetoxy-hexasiloxane, tridec: isopropyl-1-acetoxy-hexasiloxane, trideca-n-propyl-1-acetoxy-hexasiloxane, tridecaisobutyl-l-acetoxyhexasiloxane, trideca-amyl-l-acetoxy-hexasiloxane, trideca-n-butyl-1acetoxy-hexasiloxane, trideca-dodecyl-1-acetoxy-hexasiloxane, tridecahexyl-1-acetox yhexasiloxane, trideca-phenyl-1-acetoxy-hexasiloxane, or trideca-octyl-1-acetoxy-hexasiloxane.

- 21. (Previously Presented) A process according to claim 16, wherein the organosilylated carboxylate compound of general formula (III) is selected from ethyl triacetoxy silan; vinyltriacetoxy silane, dimethyldiacetoxy silane and trimethylsilylacetate.
- 22. (Previously Presented) A process according to claim 16, wherein said higher boiling acid which can be silylated to produce said silylester of formula (I) is selected from acids of C<sub>3</sub> and above.
- 23. (Previously Presented) A paint composition according to claim 8, further comprising 1 cobinder selected from:
  - Resinates of Ca, Cu or Zn
  - Naphthenates of Ca, Cu, Zn
  - Vinyls
  - Acrytates
  - Cu/Zn/Ca acrylates or polyesters
  - Tri-organosilyl(meth)acrylate copolymers
  - Hydrophilic (meth) acrylates.
- 24. (Previously Presented) A paint composition according to claim 23, wherein said co-b nder is selected from tri organo silyl(meth) acrylate copolymers.
- 25. (Previously Presented) A paint composition according to claim 24, wherein the binde incorporates poly(silylesters) or polyfunctional acids to help improve the film formin; properties of the binder.
- 26. (Previously Presented) A process according to claim 16, wherein said higher boiling: cid which can be silvlated to produce said silvlester of formula (I) is selected from alipha ic acid homologues greater than or equal to propionic acid, cyclic aliphatic acids, C4-C60 ar matic and unsaturated cyclic acids.

- 27. (Previously Presented) A process according to claim 16, wherein said higher boiling wid which can be silvlated to produce said silvlester of formula (I) is hydrogenated rosin.
- 28. (Previously Presented) A paint composition according to claim 24, wherein the binde incorporates abietyl dimers to help improve the film forming properties of the binder